

The Missouri Weather Service reports an unusual drought over a tract of country within a radius of fifty miles of Springfield, resulting in the drying up of streams and wells, causing great inconvenience to stock raisers. At Ft. Gibson, Indian Ty., on the 10th, late vegetation was withering and becoming parched; streams and wells dry; on the 30th the long-continued drought was assuming very serious proportions. At Clarksville, Tex., it was the warmest September for the past ten years, and resulted in a very severe drought; only 0.13 inches of rain has fallen since the 9th of August. At Melissa, Tex., it was dry, dusty, and smoky from the 14th to 29th, and wells, streams, and cisterns became exhausted. At Corsicana, on the 30th the severe drought still continued. At Kanab, Utah, from 1st to 27th, drought was very severe; cattle are dying for want of water and food. Many streams exhausted which have not failed before since the country has been settled; the ground is very dry, and when ploughed up appears like ashes. At Coalville, Utah, 30th, excessive drought throughout the month; all crops a failure; everything suffering for water.

*Floods.*—Brookhaven, Miss., 1st and 2nd, heavy freshets doing great damage to crops, fences, &c; the loss of stock was very great; sheep, hogs and cattle were seen floating past Monticello, on Pearl river, for three or four days, at which place the water rose 19 feet in ten hours. St. Mienrad, Ind., 1st to 3rd, high water in creeks causing great damage to fences, cord-wood, lumber, &c. Frankfort, Ky., 2nd, heavy rain at night, doing much damage by flooding. Bardstown, Ky., 5th, heavy floods doing much damage.

*Waterspouts.*—At Newport, R. I., on the 11th, about 11 a. m., a waterspout was observed over the sea about 8 miles from shore, followed at 11:40 a. m. by a thunder storm at station, and at New Haven, Conn., also on the 11th, about 6 p. m., a waterspout was observed over the Sound about 6 miles from the mouth of the harbor. It was plainly visible for half an hour, and appeared to moved very slowly, when the approaching darkness shut it out from view. At Key West on the 24th, between 2 and 3 p. m., a waterspout was observed in harbor about 3 miles from shore.

## RELATIVE HUMIDITY.

The percentages of mean Relative Humidity for the month range as follows: New England, 67 to 68; Middle Atlantic States, 66 to 83; South Atlantic States, 65 to 80; Eastern Gulf States, 69 to 83; Western Gulf States, 54 to 82; Ohio valley and Tennessee, 62 to 74; Lower Lakes, 67 to 73; Upper Lakes, 63 to 73; Upper Mississippi valley, 59 to 68; Lower Missouri valley, 51 to 59; Red River of the North valley, 66 to 73; Rocky Mountain Slope, 21 at Stockton, Tex., 72 at Boerne, Tex., 52 at Ft. Sill, 46 at Deadwood and 49 at Ft. Keogh; Plateau districts, 13 to 39; California, 34 to 79; Oregon, 68 to 70. *High stations* report the following averages, not corrected for altitude: Mt. Washington, 90.8; Pike's Peak, 46.5; Denver, 34.6; Santa Fe, 27.2; Cheyenne, 29.3.

## WINDS.

The prevailing winds, at the Signal Service stations, are shown by the arrows flying with the wind on chart No. II. The prevailing direction is from the area of highest pressure, thus, over the South Atlantic States it is decidedly northeast, over the Gulf States, easterly, and over the Lower Lakes, Middle States and New England, southerly. In the Ohio valley and Upper Lake region, and over the Northwest and western Plateau, southerly and westerly or northwesterly winds predominated. In the Pacific States, except in the Sacramento valley, the direction is westerly.

*Total Movements of the Air.*—The following were the *largest* monthly movements in miles, recorded at the Signal Corps stations: Cape Lookout 11,258 miles; Portsmouth, N. C., 11,198; Kittyhawk, 10,430; Cape May, 9,063; Sandusky, 8,879; Cape Hatteras, 8,819; Sandy Hook, 8,574; Milwaukee, 8,401; Breckenridge, 8,248; Barnegat, 8,207; Indianola, 8,090; Stockton, 7,910; North Platte, 7,863. The *smallest* movements were: Laredo, Tex., 1,500; Visalia, Cal., 1,707; Nashville, 1,745; Deadwood, 1,754; Tucson, Ariz., 2,844; Lynchburg, Va. and Fredericksburg, Tex., 1,968; Uvalde, Tex., 2,037; Indianapolis, 2,314; Shreveport, 2,358; San Antonio, Tex., 2,389; Graham, Tex., 2,390.

*Local Storms.*—At Sandy Springs, Md., on the 3rd "a tornado occurred shortly before 6 p. m., after a light shower of rain—sun shining at the time; a dark cloud was first noticed coming from the SSW., shaped like a funnel, and of a color which varied from copper and reddish to black, whirling with great rapidity and advancing at the rate of 15 to 20 miles per hour. At frequent intervals a column appeared to rise from the earth, at first white like steam, but on connecting with the funnel exhibited many hues, as if illuminated in the interior by electricity. The noise as the tornado advanced was compared to that of an immense fire, or heavy freight trains passing over a bridge. The damage was confined to the destruction of trees, fences, &c., for a length of about six miles and from thirty to one hundred yards in width. Large trees were snapped and twisted off or torn up by the roots and the branches whirled 600 feet into the air and scattered over neighboring fields. The oldest inhabitant of this vicinity can recall no parallel." At Gettysburg, Pa., on the 4th, "a tornado demolishing a church and unroofing other buildings; path of storm, about 60 feet wide and extending in an irregular direction from south to north; cloud funnel-shaped." On the night of the 7th a severe thunder-storm passed over New Jersey, traveling in a general direction toward the northeast; in Morris County, glass was broken, corn and buckwheat crops damaged, several barns struck by lightning and burned.

*Sand Storms* occurred at Fort Garland, Col., 11th; Las Cruces, New Mex., 17th; Yuma and Phoenix, Arizona, 26th; Burkes, Arizona, 24th.